KOVYAZIN, N.V.

Placing and centering device on a veneering cutting lathe. Der. prom. 5 no.1:22 Ja '56. (MLRA 9:5)

1. Chernikovskiy fanernyy kombinat.
(Chernikovsk--Veneers and veneering)

KOVYAZIN, N.V.

Some specific features of injury caused to yeast cells by two spectral ranges of ultraviolet radiation. Izv.AN SSSR.Ser.biol. no.3:423-427 My-Je '59. (MIRA 12:9)

1. The Faculty of Biology and Soil Science, The Moscow State University, Moscow.
(ULTRAVIOLET RAYS--PHYSIOLOGICAL EFFECT) (YEAST)

KOVYAZIN, N.V.

Some characteristics of the dynamics of lesions produced in yeast cells by ultraviolet rays of various wave lengths. Zhur.ob.biol. 20 no.6:464-468 N-D '59. (MIRA 13:4)

1. Chair of Biophysics, Moscow State University.
(YEAST) (ULTRAVIOLET RAYS--PHYSIOLOGICAL EFFECT)

KOVYAZIN, N.V.

Restoration of the reproductive capacity in yeasts following ultraviolet irradiation. Zhur. ob. biol. 21 no.5:382-385 S-O '60.
(MIRA 13:9)

1. Chair of Biophysics, the State University, Moscow.
(YEAST) (ULTRAVIOLET RAYS—PHYSIOLOGICAL EFFECT)

KOVYAZIN, N.V.; LUKIN, A.A.; PARFENOV, G.P.

Effect of the factors of space flight in the Vostok-2 space-ship on haploid and diploid yeast organisms. Probl.kosm.biol. 2:149-152 '62. (MIRA 16:4)
(SPACE FLIGHT--PHYSIOLOGICAL EFFECT)
(YEAST) (CHROMOSOME NUMBERS)

S/560/62/000/013/008a/009

AUTHOR: Kovyazin, N. V., A. A. Lukin, and G. P. Parfenov

TITLE: Effect of factors in the flight of the spaceship-satellite "Vostok-2" on microorganisms (investigation of yeast organisms with various ploid numbers)

PERIODICAL: Akademiya nauk SSSR. Iskusstvennyye sputniki Zemli, no. 13, 1962, 123-129

TEXT: Experiments were conducted with true haploid *Zygosaccharomyces Bailii* and diploid *Saccharomyces vini* (Megri 139-B strain) yeast cells grown in agar cultures and placed in aqueous suspensions. Small concentrations of oleic acid ($47 \cdot 10^{-2}$ to $47 \cdot 10^{-8}$%) were added to some of the suspensions as a sensitizing agent. Spaceflight factors had no adverse effect on either haploid or diploid cells in the absence of oleic acid. However, the addition of $47 \cdot 10^{-8}$% oleic acid caused a sharp increase in the sensitivity of haploid cells to these

Card 1/2

factors; their survival rate fell to 50.6%. No such effect was noted on diploid cells. It is concluded that the resistance to spaceflight factors of yeast cells in the presence of oleic acid is dependent on their ploid numbers.

ZHARIKOVA, G.G.; KOVYAZIN, N.V.; LUKIN, A.A.; MITRONOVA, T.N.; SAVCHENKO, G.V.; SILAYEV, A.B.; SUSHKOVA, I.V.

Production of gramicidin C by the flat form of Bacillus brevis var. GB. Antibiotiki 8 no.3:228-232 Mr'63 (MIRA 17:4)

1. Laboratoriya antibiotikov i kafedra genetiki biologo-pochvennogo fakul'teta Moskovskogo universiteta imeni Lomonosova.

S/020/63/148/005/027/029
B144/B186

AUTHOR: Kovyazin, N. V.

TITLE: Growth rate of macrocolonies of yeast cells irradiated with UV light of different wavelengths

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 148, no. 5, 1963, 1202-1204

TEXT: Aqueous suspensions of 24-hour-old diploid saccharomyces vini cells were irradiated in a dark room with 254 mμ UV light ($\sim$680μv·cm^{-2}·sec^{-1}) or with 310 - 320 mμ UV light (366μv·cm^{-2}·sec^{-1}). The cultures were kept at 30°C and the colonies were counted after 48 and 96 hrs. The growth rate is defined as the ratio of the number of colonies after 48 hrs to that after 96 hrs. It decreased with decreasing survival rate. It is not yet clear, whether this is due to inhibition of the first mitosis, to a general reduction of the rate of cell division, or to both. For both types of irradiation a distinct break in the curves showed that no linear dependence exists between the growth rate and the dose. Colony formation was more rapid after long-wave than after short-wave UV irradiation. The strongest bactericidal action coincides with maximum DNA absorption at 265 mμ so that the effect

of short-wave UV light may be attributed to the absorption of the energy quantum of the DNA molecule. For the long-wave effect a fermentative mechanism is assumed, which acts only indirectly over the nucleotids on the DNA and is therefore more rapidly compensated. The growth rate after irradiation with radioactive Co (0.004 - 0.0001 mμ) was much slower than after exposure to short-wave UV light. In the range of the wavelengths studied, the restoration rate of yeast cells decreased with decreasing wavelength. There is 1 figure.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

PRESENTED: July 20, 1962, by A. N. Belozerskiy, Academician

SUBMITTED: July 19, 1962

L 23533-65

ACCESSION NR: AP5002002 S/0020/64/159/006/1411/1414

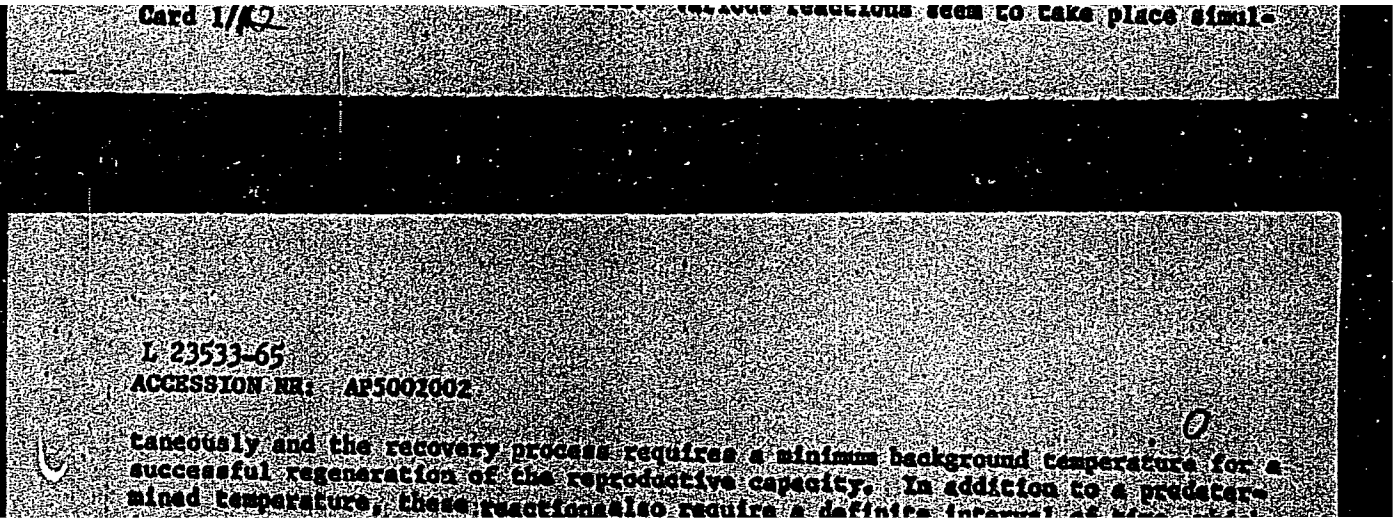
AUTHOR: Kovyazin, N. V. (Deceased); Polykova, I. N.; Pochtareva, V. I. 13

TITLE: Influence of temperature on the recovery of the reproductive function of yeast cells damaged by ultraviolet radiation

SOURCE: AN SSSR. Doklady, v. 159, no. 6, 1964, 1411-1414

TOPIC TAGS: radiation damage, yeast cell, reproduction, ultraviolet irradiation, reproduction recovery, postradiation treatment

ABSTRACT: The postradiation treatment of exposed cells is known to affect their chances for survival. Thus, one of the authors showed earlier (N. V. Kovyazin, Shurn. obshch. biol., 21, 382, 1960) that keeping UV-irradiated diploid yeast cells in aqueous [illegible]



Card 1/2 ... reverse reactions seem to take place simul-

L 23533-65
ACCESSION NR: AP5001002

taneously and the recovery process requires a minimum background temperature for a successful regeneration of the reproductive capacity. In addition to a predetermined temperature, these reactions also require a definite ...

successful regeneration of the reproductive capacity. In addition to a predetermined temperature, these reactions also require a definite interval of time, which is longer at higher doses of radiation. Orig. art. has: 2 figures.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow state university)

SUBMITTED: 25Mar64 ENCL: 02 SUB CODE: LS

NO REF SOV: 004 OTHER: 000

Card 2/4

APPROVED FOR RELEASE: Monday, July 31, 2000 CIA-RDP86-00513R000825710

KOVYAZIN, N.V. [deceased]; POLYAKOVA, I.N.; POCHTAREVA, V.I.

Effect of temp rature on the restoration of reproductive function in yeast cells injured by ultraviolet radiation. Dokl. AN SSSR 159 no.6:1411-1414 D '64 (MIRA 18:1)

1. Moskovskiy gosudarstvennyy universitet. Predstavleno akademikom A.N.Belozerskim.

KOVYAZIN, N.Ya., kand. sel'skokhoz. nauk

Let's make better use and take better care of the ground cherry and hazel thickets in the cis-Urals. Okhr. prir. na Urale no.2: 89-98 '61. (MIRA 17:7)

ACC NR: AR6035129 SOURCE CODE: UR/0313/66/000/009/0018/0018

AUTHOR: Krasnov, B. I.; Kovyazin, Ye. I.

TITLE: Organization of visual observations of artificial earth satellites at the satellite observation station of the Kirov Pedagogical Institute

SOURCE: Ref. zh. Issledovaniye kosmicheskogo prostranstva, Abs. 9.62.123

REF SOURCE: Byul. st. optich. nablyud. ISZ, no. 43, 1965, 32-35

TOPIC TAGS: artificial earth satellite, artificial satellite, artificial satellite observation

ABSTRACT: A station for the optical observation of artificial earth satellites (AES) was established three years ago in the town of Kirov on the grounds of the local pedagogical institute. Fifteen to twenty students participate annually in making the observations. The station is equipped with AT-1 and TZK tubes, a recording chronograph, a naval chronometer, a KVM radio receiver and pulse unit, and magnetophones. The moments of observations are recorded on the chronograph. Details of the organization of the observations at the station are presented.
[Translation of abstract]

SUB CODE: 17, 22/ [SP]

Card 1/1

SHAPATINA, Ye.A.; KASHURICHEV, A.P.; KOVYAZINA, L.A.

Thermal decomposition of peat and oil shale heated by means of a solid heat-carrying agent. Energotekh.ispol'.topl. no.1:171-201 '60. (MIRA 13:10)

(Peat--Thermal properties)
(Oil shale--Thermal properties)

KASHURICHEV, A.P.; KOVYAZINA, L.A.; KOBZEV, Yu.N.

Thermal treatment of Ekibastuz coal with the purpose of utilizing it as fuel and as a source of chemicals. Khim.i tekh.topl.i masel 6 no.1:42-48 Ja '61. (MIRA 14:1)

1. Institut goryuchikh iskopayemykh AN SSSR.
(Coal gasification) (Fuel)

GAKEL', R.A., kand.tekhn.nauk, starshiy nauchnyy sotrudnik;
KOVYAZINA, L.Ye., inzh.

Manufacture of high-bulk yarn by means of stapling of a string of synthetic fibers. Tekst.prom. 21 no.11:35-41 N '61. (MIRA 14:11)

1. TSentral'nyy nauchno-issledovatel'skiy institut sherstyanoy promyshlennosti (TSNIISherstі) (for Gakel').
(Yarn)
(Textile fibers, Synthetic)

GAKEL', R.A., kand.tekhn.nauk; Prinimali uchastiye: KOVYAZINA, L.Ye., mladshiy nauchnyy sotrudnik; BELYAYEV, N.N., inzh.; KUZNETSOV, R.N.; RYSEVA, S.N., mladshiy nauchnyy sotrudnik

Development of the technology for the manufacture of bulk yarn with the method of tow converting of synthetic fibers. Nauch.-issl.trudy TSNIISherati no.18:75-93 '63. (MIRA 18:1)

KUKHARENKO, A.A.; KONDRAT'YEVA, V.V.; KOVYAZINA, V.M.

"Cafetite," a new hydrous calcium and iron titanate. Zap.Vses.mim. ob-va 88 no.4:444-453 '59. (MIRA 12:11)

1. Deystvitel'nyy chlen Vsesoyuznogo mineralogicheskogo obshchestva (for Kukharenko).
(Kola Peninsula--Titanates)

ABLOV, A.V., KOVYKIN, B.A.

Study of the equilibrium of trivalent cobalt dioximines containing thiourea. Zhur. neorg. khim. 10 no.1:53-60 Ja '65. (MIRA 18:11)

1. Kishinevskiy gosudarstvennyy universitet. Submitted July 18, 1963.

KOVYKIN, S.I.

Twenty years of the Bashkirian petroleum industry. Trudy MNI no.12:7-15 '53. (MLRA 9:8)

1. Nachal'nik ob"yedineniya Bashneft'.
(Bashkiria--Petroleum industry)

KOVYLEV, B. V., Cand. Tech. Sci. (diss) "Influence of Additional Capacity on Commutation of Current in Electrical Machinery," Sverdlovsk, 1961, 15 pp. (Urals Polytech. Inst.) 150 copies (KL Supp 12-61, 268).

KOVYLIN, I.I.

FEDOROVICH, Mikhail Mikhaylovich; LEOSHKIN, A.P., dotsent, kand.ekonom. nauk; POLYAKOVA, dotsent, kand.ekonom.nauk; KOVALEVA, A.M., kand. ekonom.nauk; TIKHOMIROV, V.A., dotsent, kand.tekhn.nauk, retsenzent; KOVYLIN, I.I., inzh., retsenzent; TEPLOV, T.V., prof., doktor ekonom. nauk, retsenzent; FEDORENKO, N.P., prof., doktor ekonom.nauk, retsenzent; TROITSKIY, D.A., dotsent, retsenzent; PETRUSHEV, I.M., red.; TER-STEPANYANTS, M.S., red.; GERASIMOVA, Ye.S., tekhn.red.

[Organization and planning of chemical enterprises] Organizatsiia i planirovanie khimicheskogo predpriiatiia. Moskva, Gosplanizdat, 1959. 547 p. (MIRA 12:7)
(Chemical industries)

KOVYLIN, P.P.

Track workers improve their skills. Put' i put.khoz. no.7:25 '62. (MIRA 15:7)

1. Nachal'nik Dzhambul'skoy tekhnicheskoy shkoly, st. Dzhambul, Kazakhskoy dorogi.
(Railroads--Maintenance and repair)

TULUYEVSKIY, Yu.N.; KOVYLIN, V.A.; AKHMANAYEV, S.I., GONCHARSKIY, Ye.A.; SLOBODKIN, Ye.M.

Experience in the automatic control of thermal conditions of a large-capacity open-hearth furnace. Metallurg 10 no.6:20-22 Je '65. (MIRA 18:6)

KOVYLIN, Vasiliy Andreyevich; SAMOYLOV, V., otv.red.; PROSHINA, L., red.izd-va; TELEGINA, T., tekhn.red.

[Turnover tax on industrial goods] Nalog s oborota po promyshlennym tovaram. Moskva, Gosfinizdat, 1958. 165 p. (MIRA 13:1)

(Sales tax)

KOVYLIN, Vasiliy Andreyevich; VOLODIKHIN, V., red.; TELEGINA, T., tekhn. red.

[The turnover tax on industrial goods] Nalog s oborota po promyshlennym tovaram. Moskva, Gosfinizdat, 1963. 238 p. (MIRA 16:8)

(Sales tax)

KOVYLIN, V.M.

Third Mediterranean cruise of the research ship "Akademik S.Vavilov." Okeanologiia 1 no.4:753-755 '61. (MIRA 14:11)
(Mediterranean Sea--Oceanographic research)

KOVYLIN, V.M.

Results of seismo-acoustic research in the Java Trench. Izv.AN SSSR. Ser.geol. 26 no.11:16-25 N '61. (MIRA 14:10)

1. Institut okeanologii AN SSSR, Moskva.
(Java Trench--Seismic prospecting)

KOVYLIN, V.M.

Recent data on the thickness of bottom sediments in the Indian Ocean. Dokl. AN SSSR 136 no.4:924-926 F '61. (MIRA 14:1)

1. Institut okeanologii AN SSSR. Predstavleno akademikom N.S. Shatskim.

(Indian Ocean—Sediments (Geology))

KOVYLIN, V.M.

Results of seismic reflection work east of Africa in the region of Zanzibar Island and in the central part of the Indian Ocean. Okeanologiia 1 no.3:466-472 '61. (MIRA 16:11)

1. Institut okeanologii AN SSSR.

KOVYLIN, V.M.

Study of the structure of sedimentary formation in the Mediterranean Sea. Okeanologiia 4 no.1:81-85 '64. (MIRA 17:4)

1. Institut okeanologii AN SSSR.

ACCESSION NR: AP4034042 S/0020/64/155/006/1429/1431

AUTHOR: Neprochnov, Yu. P.; Kovy*lin, V. M.; Selin, Ye. A.; Zdorovenin, V. V.; Karp, B. Ya.

TITLE: New data on the structure of the earth crust in the sea of Japan

SOURCE: AN SSSR. Doklady*, v. 155, no. 6, 1964, 1429-1431

TOPIC TAGS: earth crust structure, seismic investigation, Japan Sea profile, oceanology, Mohorovichich surface, oceanography

ABSTRACT: The Oceanological Institute of AN SSSR, together with the Pacific Division of the Institute, conducted in 1962 seismic investigations of the structure of the earth crust in the northern part of the Sea of Japan. Two ships participated in the measurements which were extended over a distance of 240 miles. Both the methods of refracted and reflected waves were used. For deep probing, the recording stations were stationary, and the explosion points were displaced along the distance under study. As sources of elastic oscillations, explosions of trotyl charges were used, 130 kgm for deep probing by the refraction method, and 1 to 10 kgm for the reflection method, depending on the depth. [illegible]

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ACCESSION NR: AP4034042

crust in the investigated region was found to consist essentially of two layers: one of sedimentary nature of 1.6 to 2 km thickness, another belonging to the "basalt" layer of the earth crust. The sedimentary layer consists of at least three formations. Orig. art. has: 3 figures.

ASSOCIATION: Institut okeonologii Akademi Nauk SSSR (Institute Oceanology, Academy of Sciences SSSR)

SUBMITTED: 15Jul63 DATE ACQ: 20May64 ENCL: 00

SUB CODE: ES NO REF SOV: 002 OTHER: 000

Card2/2

KOVYLIN, V.M.; NEPROCHNOV, Yu.P.

Structure of the earth's crust and sedimentary cover in the central part of the Sea of Japan according to seismic data. Izv. AN SSSR. Ser.Geol. 30 no.4:10-26 Ap '65.

(MIRA 18:4)

1. Institut okeanologii AN SSSR, Moskva.

L 25997-66 EWT(1)/EWA(h) GW

ACC NR: AP6014284 SOURCE CODE: UR/0213/66/006/002/0294/0305

AUTHOR: Kovylin, V. M.

ORG: none

TITLE: Results of seismic investigations in the southwestern part of the deep-water basin of the Sea of Japan

SOURCE: Okeanologiya, v. 6, no. 2, 1966, 294-305

TOPIC TAGS: oceanographic expedition, deep seismic sounding, reflection shooting, Mohorovicic discontinuity, crustal thickness

ABSTRACT: In 1963, the Institute of Oceanography, AN SSSR, supplemented earlier seismic surveys made in the Sea of Japan by running a profile of more than 400 km from the continental slope of Asia, across the deep-water basin, to the southern part of the Sea of Japan (see Fig. 1). Both the deep seismic-sounding (GSZ) and reflected-wave (MOV) methods were used (10 GSZ stations; MOV stations spaced 3—5 km apart along the entire profile). GSZ techniques involved the use of two ships moving along the profile 2—5 miles apart, one detonating 130-kg TNT charges at depths of 90—150 m, and the other carrying broadband hydrophones and N-700 oscillographs, registering P*, P^M, P*R, P^MR, R_1, R_2, and R_3 waves. The MOV method was used to obtain information on the structure of the sedimentary layer. TNT charges of 5 kg were detonated 1 m below the surface of the sea. Analyses and comparisons of the data

Card 1/3 UDC: 550.311

L 25997-66

ACC NR: AP6014284

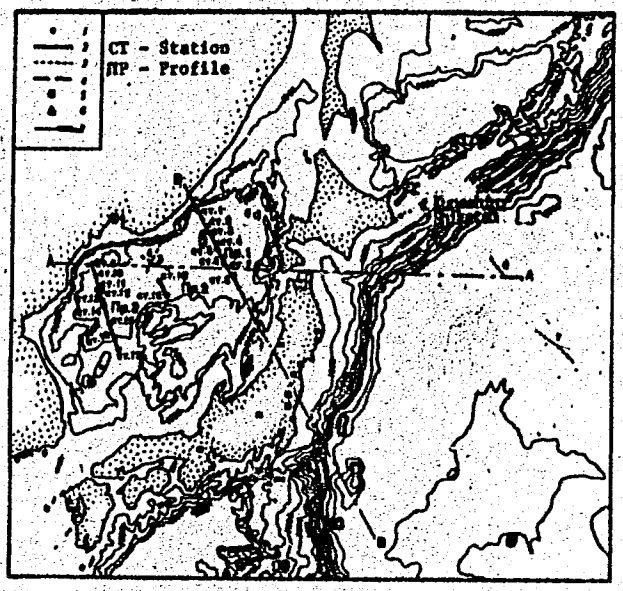

Fig. 1. Sketch showing disposition of GSZ stations and MOV profiles

1 - GSZ stations; 2 - GSZ and MOV profiles; 3 - 1957 profiles; 4 - MOV profiles; 5 - GSZ stations in Japan; 6 - MOV stations determined by the Institute of Oceanography, AN SSSR.

Card 2/3

L 25997-66
ACC NR: AP6014284

obtained by both methods indicate that in the south-central part of the sea, the crust consists of the usual two layers—the upper sedimentary layer, 0.7—1.7 km thick, and the "basalt" layer, 9—12 km thick (thickest toward the north, thinning toward the Japanese Islands), and has a boundary velocity of 6.6 km/sec. The Moho discontinuity has a velocity of V_r = 8.2 km/sec. MOV data distinguished three separate sectors in the profile. In the first sector (stations 119—123) 7—9 groups of waves were reflected in the sedimentary layer, which was found to be 1.0—1.5 km thick. In the second sector (stations 124—156) there were 7—11 groups of waves, and the sedimentary layer was 1.2—2.2 km thick. In the third sector (stations 156—176) there were 3—8 wave groups, and the thickness of the sedimentary layer was 300—1400 km. The main interface in the latter area was found to have a dome-shaped rise. At the Moho d_{eff} = 1—1.7 x 10^{-5} m^{-1}. Orig. art. has: 7 figures and 2 tables. [ER]

SUB CODE: 08/ SUBM. DATE: 27May65/ ORIG REF: 007/ OTH REF: 001/ ATD PRESS: 4255

Card 3/3

ACC NR: AP6021605 SOURCE CODE: UR/0020/66/168/005/1048/1051

AUTHOR: Kovylin, V. M.; Karp, B. Ya.; Shayakhmetov, R. B.

ORG: Institute of Oceanology, Academy of Sciences, SSSR (Institut okeanologii Akademii nauk SSSR)

TITLE: Structure of the earth's crust and sedimentary strata of the Sea of Japan on the basis of seismological data

SOURCE: AN SSSR. Doklady, v. 168, no. 5, 1966, 1048-1051

TOPIC TAGS: earth crust, seismic wave, ocean acoustics, wave propagation, seismograph

ABSTRACT: The cross section profile 500 km in length located in the middle and southern parts of the Sea of Japan was investigated using shot points at depths of 90-150 m, broad-band geophones, and an analyzer for recording bottom reflections. Sea depths and sedimentary bed structures were studied by recording reflected waves when the vessel was in motion. The study of the seismographs indicated the presence of two types of reflected waves P^{A} and P^{M} at the distance intervals 10-43 km and 37-81 km, respectively. For the construction of the P^{A} wave type, it was assumed that its near velocity of propagation in the sedimentary beds was 2.0 km/sec. For the construction of the P^{M} wave type, using the method of time fields, it was assumed that its velocity of

UDC: 550.834

ACC NR: AP6021605

propagation in the beds was 6.5 km/sec. Both construction methods gave 4.8-5.3 km/sec as the mean velocity of propagation in the earth's crust. The data show that the earth's crust in the profile has two basic layers: the upper one is of sedimentary ttype, 0.7-1.7 km in thickness, and the lower one of basaltic type, 9-12 km in thickness, with the Mohorovicic (*M*) boundary located where the velocity of propagation is equal to 8.2 km/sec. The upper layer, using the kinematic and dynamic characteristics, can be subdivided into 10-12 reflecting horizons; its maximum thickness is in the northern part of the profile. Presented by Academician D. I. Shcherbakov on 2 February 1965. Orig. art. has: 2 figures.

SUB CODE: 08/ SUBM DATE: 02Feb65/ ORIG REF: 002

Card 2/2

S/169/62/000/006/025/093
D228/D304

AUTHOR: Kovylin, V. M.

TITLE: Results of seismo-acoustic investigations to the east of Africa in the area of Zanzibar Island and in the Indian Ocean's central part

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 6, 1962, 25, abstract 6A181 (Okeanologiya, 1, no. 3, 1961, 466-472)

TEXT: The results of the investigation of sediment thicknesses during the 31st voyage of the expedition vessel "Vityaz'" are described. The reflection method was used; observations were conducted on a 340-mile long profile, passing to the east of Zanzibar Island, and also at two points in the Indian Ocean's central part. On the profile stations were located every 15 - 30 miles on the slope of the ocean floor and every 60 miles in the ocean's abyssal part. The observations were made with 8-channel floating pickup equipment. The recording was conducted by a portable seismic survey station. Seismic waves were received on frequencies below 30

Card 1/2

Results of seismo- ...

c/s. The velocities in sediments were estimated from effective reflection factors, definable on the recordings of single and double reflections from the bottom and from intersediment boundaries. The density values were taken from standard ocean-crust columns; for the top, near-bottom layer of sediments a density value (of 1.4 g/cm^3) was adopted by taking into account the results of laboratory determinations of the density of ground samples, collected by means of tubes. From three to four reflecting horizons were distinguished near Zanzibar Island. The speeds in the sediments' top, second and third layers were 1.6, 2.7 and about 5 km/sec respectively. These layers are related to uncompacted and compacted sediments and lithified sedimentary rocks or the "granite" layer. The total thickness of sediments is about 0.6 km. Three reflecting horizons were distinguished in the Indian Ocean's central part at two stations; the velocity in the top sediment layer equals 1.9 m/sec [Abstracter's note: Should read km/sec ?], being 3.2 km/sec in the deeper layer. The sediment thickness is about 0.25 km. The materials obtained indicate that the thickness of the sediment cover diminishes from the edges of the Indian Ocean towards its center. [Abstracter's note: Complete translation.]

Card 2/2

S/169/62/000/005/065/093
D228/D307

AUTHOR: Kovylin, V. M.

TITLE: Seismoacoustic investigations in the ocean by the reflection method with a multichannel receiving system

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 5, 1962, 9, abstract 5V64 (V sb. Okeanol. issledovaniya, no. 4, M., AN SSSR, 1961, 100-109)

TEXT: Investigations made by the reflection method with the use of a multichannel receiving system, give relatively detailed information about the structure of the supper sedimentary-rock layer and also about the processes connected with the redistribution of sedimentary material. Investigations by the reflection method with the described receiving system give good results at any ocean depth without the use of a second vessel. The employed apparatus is simple and reliable in its operation. [Abstracter's note: Complete translation.]

Card 1/1

Kovylin, V. M.

Papers submitted for the 10th Pacfic Science Congress, Honolulu, Hawaii 21 Aug-6 Sep 1961.

[illegible], A. G., PIVOVAROV, A. A., and IVANOVA, Z. S., Moscow State University, Physical Faculty, Chair of Marine Physics and Terrain Waters - "On the calculation of rate of radioactivity spreading in depths" (Section VII.B.6)

[illegible], V. M., Institute of Zoology - "The method of spicule analysis and possibilities of its use in paleogeographical studies of the Pacific Ocean" (Section III.C)

[illegible], Ye. V., Institute of Geology - "Distribution of spores and pollen of terrestrial plants in botton sediments of the Pacific" (Section III.A)

KORT, V. G., Director, Institute of Oceanology - "The heat exchange between the Antarctic waters and the adjacent oceanic waters" (Section VII.D.1)

[illegible], M. N., Institute of Oceanology - "An example of the computation of the deep currents in the northeastern Pacific" (Section VII.B)

[illegible], M. V., and [illegible], Olga I., Institute of Oceanology - "The interrelation between turbidity, phytoplankton and primary production" (Section III.C.4)

[illegible], M. V., Institute of Oceanology - "On the relation between water transparency and the character of currents in some areas of the Pacific Ocean" (Section VII.B)

[illegible], Irina P., [illegible], R. M., [illegible], P. S., [illegible], S. M., [illegible], N. I., and GAL'[illegible], B. I., Institute of Earth Physics imeni O. Yu. Schmidt - "Structure of the earth crust in the transition zone from the northwestern part of the Pacific to the Asiatic continent" (Section VII.C.2)

[illegible], Irina P., [illegible], R. M., and [illegible], S. M., Institute of Earth Physics imeni O. Yu. Schmidt - "Specific features of the sedimentary layer in the Okhotsk Sea and in the adjacent parts of the Pacific" (Section VII.C.2)

KOVYLIN, V. M., [illegible], S. M., [illegible], G. B., [illegible], [illegible], and [illegible], G. N., Institute of Oceanology - "On the relation between sedimentation and bottom topography in the northwestern part of the Pacific Ocean" (Section VII.C.1)

[illegible], P. N., Institute of Geology - "The tectonic map of the Pacific Ocean and the circum Pacific mobile belt (scale 1:10,000,000)" (Section VII.C)

[illegible], M. A., and [illegible], Ye. F., The Siberian Department of the Academy of Sciences USSR - "On the results of investigations of tsunami in the USSR" (Section V.B.1)

[illegible], V. V., Institute of Oceanology - "Hydrological data involved with oceanic troughs in the Pacific and some problems connected with prospect research" (Section VII.B)

[illegible], M. G., Institute of Ethnology - "Once more on the Ainu problem" (Section II.B)

[illegible], A. P., Institute of Oceanology -"The composition of organic suspended material in the Pacific in connection with the problems of sedimentation" (Section VII.C.1)

LISITSYN, A. P., Institute of Oceanology - "Bottom sediments in the Antarctic" (Section VII.D.1)

[illegible], V. V., Institute of Oceanology - "Cyclonic activity and climatologic fronts in the northern part of the Pacific Ocean" (Section VII.A)

[illegible], T. G., All-Union Scientific Research Institute of Marine Fishing and Oceanography - "Some results of icthyological investigations in the gulf of Alaska" (Section III.C)

[illegible], V. A., Moscow State University, Physical Faculty, Chair of Hard Crust - "Geophysical data and the problem of the origin of the Pacific Ocean" (Section VII.C.2)

[illegible], V. S., Institute of Oceanology - "The specific features of bench formation in tidal seas" (Section VII.C.1)

[illegible], O. B., Institute of Oceanology - "Qualitative-quantitative distribution of the littoral fauna and flora in the northwestern part of the Pacific" (Section III.C)

[illegible], Ivan O., Institute of Oceanology - "The process of mar[illegible] sedimentation in the areas of the Kuril Isle arc" (Section VII.[illegible].1)

ZVEREV, S.M.; KOVYLIN, V.M.; UDINTSEV, G.B.

Recent data on the tectonics of the northwestern submarine elevation of the Pacific Ocean. Dokl. AN SSSR 135 no.6:1461-1464 D '60. (MIRA 13:12)

1. Institut okeanologii Akademii nauk SSSR i Institut fiziki Zemli Akademii nauk SSSR. Predstavleno akademikom N.S.Shatskim.
(Pacific Ocean--Submarine geology)

L 10401-67 EWT(m)

ACC NR: AP7003130 SOURCE CODE: UR/0415/66/000/002/0148/0150

AUTHOR: Burtsev, L. I.; Koylov, V. G.

ORG: Mining Institute im. A. A. Skochinskiy, Moscow (Institut gornogo dela)

TITLE: Investigation of the acoustic rigidity of a concrete foundation

SOURCE: Fiziko-tekhnicheskiye problemy razrabotki poleznykh iskopayemykh, no. 2, 1966, 148-150

TOPIC TAGS: concrete, acoustic property

ABSTRACT: The problem of the accoustic rigidity of concrete artificial pillars used in mine reinforcement is essential where blasting is part of the ore extraction operation. An investigation of the acoustic rigidity of concrete as a function of its composition and properties was performed using cubic samples 10X 10X 10Cm^3 of concrete with various granulometric compositions of inert cement. After setting was complete, the specific gravity of the concrete cubes was measured, the velocity of sound in the samples was determined and they were tested for strength. Concrete made of various types of gravel showed the highest velocity of sound; reducing the quantity of gravel and increasing the content of sand caused a reduction in the velocity of sound. Concrete made with sand has the least acoustic rigidity. Maximal strength was found to be characteristic of the concrete samples with 35 to 55% sand, which is probably the optimal composition

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L 10401-67

ACC NR: AP7003130

providing the greatest pore filling with various varieties and porosities of gravel. It was determined that with various concrete mixtures, all using the same amount of cement per cubic meter, with an identical explosive charge at identical distance from a pillar, the greatest destruction of the pillar will take place for gravel concrete, the least - for the concrete of optimal composition (35-55% sand).

Orig. art. has: 3 figures and 1 table. [JPRS]

SUB CODE: 11 / SUBM DATE: 22Aug65

Card 2/2

ACC NR: AT6031372 (N) SOURCE CODE: UR/0000/66/000/000/0153/0157

AUTHOR: Kovylin, V. M.; Neprochnov, Yu. P.; Udintsev, G. B.

ORG: none

TITLE: Use of ultrasonic waves to study the layering and speed of propagation of elastic waves in ocean sediments

SOURCE: AN SSSR. Institut fiziki Zemli. Geoakustika; ispol'zovaniye zvuka i ul'tra-zvuka v seysmologii, seysmorazvedke i gornom dele (Geoacoustics; the use of sound and ultrasound in seismology, seismic prospecting, and mining). Moscow, Izd-vo Nauka, 1966, 153-157

TOPIC TAGS: underwater explosion, ocean acoustics, oceanographic equipment, oceanographic ship, ultrasonic wave propagation

ABSTRACT: Experiments carried out by the Institute of Oceanology, AN SSSR to determine the speed of propagation of elastic waves and layering of ocean-bottom sediments are described. The speed was measured both in the laboratory, using core samples, and also directly on the ocean floor. The work began in 1957 and has continued since that time. Measurement of speeds of elastic waves in core samples was carried out using a UZS-2 seismoscope. Each core is sampled at 1 cm intervals along its length. The maximum experimental error in this series of tests is found to be 1.6%. Speeds range from

Card 1/2

ACC NR: AT6031372

1430 to 1620 m/sec. Results are given of tests on a 15 m long core. To measure the speed of elastic waves directly on the ocean bottom, a special apparatus was constructed, consisting of a supporting frame carrying the ultrasonic source and receiver. Signals from the receiver are carried by cable to the ship and recorded on a seismoscope. The source is usually buried to a depth of 50 cm in the sediments, and the separation between source and receiver is 50 cm. The last section discusses some problems of using commercial sounding devices in experimental studies. In recent years, a phototelegraphic recorder, "Ladoga", has been successfully used both in depth soundings and for studies of layering in the ocean sediments. This apparatus has been used on the *Vityaz'* in the Pacific and Indian Oceans, and on the *Petr Lebedev* and *Batayak* in the Atlantic. Orig. art. has: 3 figures.

SUB CODE: 08,13/ SUBM DATE: 28Mar66/ ORIG REF: 004/ OTH REF: 002

Card 2/2

KOVYLIN, Yu.Ya.; BASOV, S.A.

Interaction of an electromagnetic vibrator with a source of sinusoidal strain. Fiz.-tekh. probl. razrab. pol. iskop. no.4: 66-75 '65. (MIRA 19:1)

1. Tomskiy politekhnicheskiy institut. Submitted March 10, 1965.

KOVYLIN, Yu.Ya.; SURKOV, G.V.

Factors having an effect on the unit metal content in springs of resonance vibration equipment. Fiz.-tekh. probl. razrab. pol. iskop. no.5:115-118 '65. (MIRA 19:1)

1. Politekhnicheskiy institut, Tomsk.

KOVYGIN, Yu. Ya.; SURKOV, G. V.; TITOV, V. N.

Composite suspension of vibratory hoppers and hoists. Stan. i instr. 35 no.5:25-27 My '64. (MIRA 17:7)

KOVYLIN, Yu.Ya., inzh.

Dynamic calculation of three-bar linkages of curvilinear forward-moving rockers. Izv. vys. ucheb. zav.; mashinostr. no.2:27-34 '63. (MIRA 16:8)

1. Tomskiy politekhnicheskiy institut.

KOVYLIN, Yu.Ya., inzh.

Evaluating the strain and the amount of metal needed for suspensions of vibratory feeding and hoisting devices. Izv. vys. ucheb. zav.; mashinostr. no. 12:115-126 '63. (MIRA 17:9)

1. Tomskiy politekhnicheskiy institut.

SOV/144-59-5-13/14

AUTHORS: Deryuga, I.F., Assistant, Kovylin, Yu.Ya., Senior Lecturer, Mal'tsev, P.T., Senior Lecturer, Murin, A.V., Assistant, Surkov, G.V., Assistant, Titov, V.N., Candidate of Technical Sciences, Docent, Khalyavin, A.I., Senior Lecturer.

TITLE: An Installation for the Displacement of a Betatron Electromagnet

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Elektromekhanika, 1959, Nr 5, pp 110 - 113 (USSR)

ABSTRACT: In practice it is often necessary to displace the betatron electromagnet both in the vertical and horizontal direction, and also to carry out a rotation about a horizontal axis.. The authors state that Western literature (Refs 1 - 4) does not give sufficient detail of how this is carried out. The Tomsk Polytechnical Institute has therefore designed and built an installation which may be used to displace the betatron electromagnet in the above way.

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An Installation for the Displacement of a Betatron Electromagnet

The magnet is raised or lowered (Figure 1) with the aid of motor driven screws 1. It may be rotated with the aid of another motor driven screw 7, and displaced in a horizontal direction on a pair of rails on which the wheels 14 run. The maximum vertical displacement is 1000 mm and the displacement can be carried out at the rate of 0.36 m/min. The maximum angular displacement of the electromagnet is 60° and the maximum horizontal displacement is unlimited. The rate of the angular displacement is 0.124 - 0.106 rev/min and the rate of the horizontal displacement is 0.55 m/min. The weight of the installation is 3.5 tons. There are 2 figures and 5 references, of which 3 are English, 1 is German and 1 is Soviet.

ASSOCIATION: Kafedra prikladnoy mekhaniki, Tomskiy politekhnicheskiy institut (Chair of Applied Mechanics, Tomsk Polytechnical Institute)

KOVYLIN, Yu.Ya., starshiy prepodavatel'

Applying Professor N.I. Mertsalov and Professor K.E. Rerikh's method in calculating flywheels. Izv. vys. ucheb. zav.; mashinostr. no. 10:24-30 '60. (MIRA 14:1)

1. Tomskiy politekhnicheskiy institut imeni S.M. Kirova.
(Mechanical movements)

KOVYLIN, Yu.Ya., starshiy prepodavatel'

Designing the assembly of coaxial multiple-satellite mechanisms.
Izv.vys.ucheb.zav.; mashinostr. no.11:190-199 '61. (MIRA 14:12)

1. Tomskiy politekhnicheskiy institut im. S.M.Kirova.
(Gearing)

KOVYLIN, Yu.Ya., inzh.

Synthesis of three-bar linkages of curvilinear cranks. Izv.vys.ucheb. zav.;mashinostr.no.1:13-19 '63. (MIRA 16:5)

1. Tomskiy politekhnicheskiy institut.
(Mechanical movements)

USSR/Diseases of Farm Animals - Diseases Caused by Bacteria and Fungi. R-2

Abs Jour : Ref Zhur - Biol., No 14, 1958, 64621

Author : Kovylina, V.A.; Sidorov, T.I.; Yergayev, K.P.
Inst : -
Title : Experience in the Complex Treatment of Calves Affected with Paratyphoid.

Orig Pub : Veterinariya, 1958, No 1, 64-65.

Abstract : An account is given of a good therapeutic effectiveness of synthomycin and biomycin when used in combination with anti-paratyphoid serum.

Card 1/1

KOVYLINA, V.A., (Candidate of Veterinary Sciences, Scientific-Industrial Laboratory on the control of Diseases of the Younger Generation of Agricultural Animals of the Ministry of Agriculture of RSFSR)

"Acute catarrhal (contagious) conjunctivitis of chickens."

Veterinariya, Vol 39, no 1, Jan 1962. pp 46

KOVYLINA, V.A., kand.veterinarnykh nauk

Acute catarrhal (infectious) conjunctivitis in chicks.
Veterinariia 29 no.1:46-48 Ja '62. (MIRA 14:2)

1. Nauchno-proizvodstvennaya laboratoriya po bor'be s boleznyami molodnyaka sel'skokhozyaystvennykh zhivotnykh Ministerstva sel'skogo khozyaystva RSFSR.
(Conjunctivitis)
(Poultry--Diseases and pests)

KOVYLINA, V. N

PHASE I BOOK EXPLOITATION SOV/2216

5(4)

Soveshchaniye po elektrokhimii. 4th, Moscow, 1956.

Trudy...: Sbornik: (Transactions of the Fourth Conference on Electrochemistry: Collection of Articles) Moscow, Izd-vo AN SSSR, 1959. 868 p. Errata slip inserted. 2,500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye khimicheskikh nauk.

Editorial Board: A.N. Frumkin (Resp. Ed.) Academician, O.A. Yesin, Professor, S.I. Zhdanov (Resp. Secretary), B.N. Kabanov, Professor, S.I. Zhdanov (Resp. Secretary), B.N. Kabanov, Professor, Ya. M. Kolotyrkin, Doctor of Chemical Sciences, V.V. Losev, P.D. Lukovtsev, Professor, Z.A. Solov'yeva, V.V. Stender, Professor, and O.M. Florianovich; Ed. of Publishing House: N.G. Yegorov; Tech. Ed.: T.A. Prusakova.

PURPOSE: This book is intended for chemical and electrical engineers, physicists, metallurgists and researchers interested in various aspects of electrochemistry.

COVERAGE: The book contains 127 of the 138 reports presented at the Fourth Conference on Electrochemistry sponsored by the Department of Chemical Sciences, USSR, and the Institute of Physical Chemistry, Academy of Sciences, USSR. The collection pertains to different branches of electrochemical kinetics, double layer theories and galvanic processes in metal electrodeposition and industrial electrolysis. Abridged discussions are given at the end of each division. The majority of reports not included here have been published in periodical literature. No personalities are mentioned. References are given at the end of most of the articles.

Card 28/34

KOVYLINA, V. N.

PHASE I BOOK EXPLOITATION SOV/2216

5(4)

Soveshchaniye po elektrokhimii. 4th, Moscow, 1956.

Trudy...[sbornik] (Transactions of the Fourth Conference on Electrochemistry; Collection of Articles) Moscow, Izd-vo AN SSSR, 1959. 868 p. Errata slip inserted. 2,500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye khimicheskikh nauk.

Editorial Board: A.N. Frumkin (Resp. Ed.) Academician, O.A. Yesin, Professor, S.I. Zhdanov (Resp. Secretary), B.N. Kabanov, Professor, S.I. Zhdanov (Resp. Secretary); B.N. Kabanov, Professor, Ya. M. Kolotyrkin, Doctor of Chemical Sciences; V.V. Losev, P.D. Lukovtsev, Professor; Z.A. Solov'yeva; V.V. Stender, Professor; and O.M. Florianovich; Ed. of Publishing House: N.G. Yegorov; Tech. Ed.: T.A. Prusakova.

PURPOSE: This book is intended for chemical and electrical engineers, physicists, metallurgists and researchers interested in various aspects of electrochemistry.

COVERAGE: The book contains 127 of the 138 reports presented at the Fourth Conference on Electrochemistry sponsored by the Department of Chemical Sciences and the Institute of Physical Chemistry, Academy of Sciences, USSR. The collection pertains to different branches of electrochemical kinetics, double layer theories and galvanic processes in metal electrodeposition and industrial electrolysis. Abridged discussions are given at the end of each division. The majority of reports not included here have been published in periodical literature. No personalities are mentioned. References are given at the end of most of the articles.

KOVYLINA, V.N.

137-1957-12-23524

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 12, p 98 (USSR)

AUTHORS: Kovylina, V. N., Chizhikov, D. M.

TITLE: An Investigation of the Anodic Polarization of Alloys of the Sulfides of Copper, Lead, Zinc, and Iron (Issledovaniye anodnoy polyarizatsii splavov sul'fidov medi, svintsa, tsinka i zheleza)

PERIODICAL: Tr. In-ta metallurgii AN SSSR, 1957, Nr 1, pp 70-77

ABSTRACT: A study of the anodic polarization of the sulfides of Pb and Zn, as well as of certain alloys of the sulfides of Cu, Pb, Zn, and Fe. The potential was measured by the compensation method by means of a PPTV potentiometer. A saturated calomel electrode served as one of the half-elements, whereas the other one was composed of the alloy being studied, immersed in an appropriate solution. The sulfides of Cu, Pb and Fe were obtained by heating the mixtures of the pure metals and S. The powdered sulfides were then melted in a Silit furnace and held at their melting temperatures for a period of two hours. The alloys of the sulfides were prepared by fusing mono-metallic sulfides. Anodes of 20 x 25 x 5 mm were cast with the sulfides of the alloys and Pb...

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An Investigation of the Anodic Polarization of Alloys (cont.)

sulfide. The temperature of fusion was 1200°. The cooling was accomplished in air. The changes in the potential were determined with the following D_a values: 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700 a/m^2. The potential was measured 1 min after the given D had been established. It was established that an increase in the temperature displaces the potential of the sulfide alloys in the direction of the electronegative values and moves the potential jump into the area of the higher D's. The anodic dissolution of the ternary alloys of the sulfides of Cu, Pb, and Zn should be performed at a temperature of 50° and with a value of D not exceeding 250-300 a/m^2. The electrolysis of the quaternary alloys of Cu, Pb, Zn, and Fe should be performed at a temperature of 50° and a D which does not exceed 500 a/m^2.

G. S.

1. Copper sulfides alloys-Anodic polarization 2. Lead sulfides alloys-Anodic polarization 3. Zinc sulfides alloys-Anodic polarization 4. Iron sulfides alloys-Anodic polarization

Card 2/2

KOVYLKIN, G. (Kuzbass)

Open heart. Sov.shakht. 10 no.10:28 O '61. (MIRA 14:12)
(Kuznets Basin--Coal miners)

SUVOROV, N.N.; NOVIKOVA, V.M.; SOKOLOVA, L.V.; KOVYLKINA, N.F.

Microbiological transformation of cortisone with the aid of mycobacteria B-5. Med.prom. 14 no.1:22-24 Ja '60. (MIRA 13:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze.
(CORTISONE)

SUVOROV, N.N.; NIKIFOROVA, O.K.; SOKOLOVA, L.V.; KOVYLKINA, N.F.; LEYBEL'MAN, F.Ya.

New synthesis of Reichstein's substance "S." Med.prom. SSSR 14 no.12: 9-12 D '60. (MIRA 13:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikizde.
(CORTICOSTERONE)

SOKOLOVA, L.V.; KOVYLKINA, N.F.; SUBOROV, N.N.

Production of Δ1-dehydrocortisone from dihydrocortisone acetate. Med. prom. 15 no.6:15-17 Je '61. (MIRA 15:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze.
(PREGNADIENETRIONE)

KOVYLOV, B.V.; GAVRILOV, B.K.; PLASTUN, A.T.

Single-phase mechanical rectifier with capacitance in the excitation circuit of the synchronous motor. Trudy Ural. politekh. inst. no.124:16-24 '62. (MIRA 16:8)

SOV/144-59-6-5/15

AUTHORS: Siunov, N.S., Doctor of Technical Sciences, Professor, and Kovylov, B.V., Aspirant (Boris Vladimirovich)

TITLE: The Influence of Additional Capacitance on Current Commutation

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Elektromekhanika, 1959, Nr 6, pp 34 - 40 (USSR)

ABSTRACT: A very brief review is given of recent work on the physical processes of the final stage of current commutation in machines. The process is explained with reference to the diagram in Figure 1. The short-circuit time T in the diagram generally differs from the actual time of the electro-magnetic transient commutation process, so that there is a residual current i_o at the instant when contact is broken. Previous authors have noted the influence of the coil capacitance on the commutation current, its effect being to reduce the probability of sparking. Since the natural capacitance of a coil is very small, Tur, in an article in Elektrichestvo, 1956, Nr 11, described the effects of including an additional capacitance ten times as great as the natural capacitance.

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The Influence of Additional Capacitance on Current Commutation

In order to study the influence of such additional capacitance, the authors built a rig, the schematic circuit diagram of which is given in Figure 2. The parallel circuits of the machine are represented by two generators and the portion undergoing commutation by an inductance and resistance in series shunted by a capacitance. A commutator is provided and as it rotates the section investigated is periodically shorted. The inductance and resistance were given values typical of an ordinary machine but the added capacitance was 10-14 μF. This is much greater than typical normal values of 2×10^{-4} μF but was necessary in order to reveal the influence of capacitance on commutation. The equipment was used to plot curves of sparking threshold and of permissible sparking zones both with and without capacitance. The curves shown in Figure 3 represent the threshold of sparking taken with the natural capacitance of 2×10^{-4} μF and with an additional capacitance of 10 μF. It will be seen that the addition of capacitance displaces

the curve of sparking threshold in such a way that the commutating properties are improved and, in addition, the zone of permissible sparking is extended. Equations (1) and (2) are the main differential equations of the final stage of commutation; they are solved in an appendix, where it is shown that when $C = L/r^2$ the commutation process is aperiodic. If the ohmic resistance of the section is constant the capacitance at which the aperiodic process commences depends on the section inductance, as indicated in Table 1. It is shown that the values of current in the capacitance, current in the section, voltage in the section and rate of voltage-restoration are primarily functions of the current in the capacitance at the instant when the brush breaks circuit, which is taken as the initial time.

If the process is periodic the current and voltage in the section each consist of two components: one is constant and the other is periodic and diminishes exponentially.

The Influence of Additional Capacitance on Current Commutation

By increasing the capacitance the frequency of the periodic component is decrased.
In actual machines the natural capacitance of the commutator and section is always much smaller than the values given in Table 1, whilst the values of inductance and resistance are similar; thus, a damped periodic process is always present in actual machines.
An oscillogram of the section voltage taken on the experimental rig with the natural capacitance of 10^{-4} μF is given in Figure 4. It will be seen that in this case the variable component of the voltage becomes a peak. An oscillogram of the current in the section in the presence of additional capacitance is given in Figure 5 and if the current curve is compared with one constructed from Eq (13) of the appendix it will be seen that the agreement is good. Correspondingly, the oscillogram of Figure 6 and Eq (14) of the appendix relate to section voltage and are in good agreement.
Certain differences between conditions in actual machine commutators and in the rig are briefly explained with

The Influence of Additional Capacitance on Current Commutation

reference to the sketch in Figure 7. It is shown that there is a certain voltage U_1 at which the contacts can break without arcing, even though there is a considerable current before the circuit is interrupted. Commutation can be improved by reducing the voltage; in general, this is only possible by reducing the constant component by the use of interpoles or by reducing the amplitude of the varying component by increasing the capacitance. In the limiting case, when the capacitance is sufficient to make the process aperiodic, the amplitude of the section over-voltage is equal to the constant component and if this is made equal to the voltage U_1 no sparking will occur, whatever the value of current interrupted.
There are 7 figures, 1 table and 5 Soviet references.

Card 5/5

Dept. Electrical Machines, Ural Polytech Inst.

SIUNOV, N.S., doktor tekhn.nauk; GABRILOV, B.K., kand.tekhn.nauk;
KOVYLOV, B.V., inzh.

Synchronous motor with a mechanical rectifier shunted by capacitance.
Vest.elektroprom. 32 no.2:45-48 F '61. (MIRA 15:5)
(Electric motors, Synchronous)

KOVYLOV, Boris Vladimirovich, inzh.

Study of current commutation in electrical machinery with consideration of the capacitance in the collector sections. Izv.vys.ucheb. zav.; elektromekh. 5 no.3:347-348 '62. (MIRA 15:4)

1. Kafedra elektricheskikh mashin Ural'skogo politekhnicheskogo instituta.
(Commutation (Electricity)) (Electric machinery)

88170

S/144/60/000/010/007/010
E194/E355

9.3250 (1020, 1143, 1154)

AUTHORS: Siunov, N.S., Doctor of Technical Sciences, Professor, Departmental Head, Gavrilov, B.K., Candidate of Technical Sciences, Senior Lecturer and Kovylov, B.V., Assistant

TITLE: The Influence of Capacitance on the Operation of a Mechanical Rectifier

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Elektromekhanika, 1960, No. 10, pp. 93 - 97

TEXT: Current commutation by a mechanical rectifier in the field circuit of a synchronous motor may be improved by shunting the rectifier brushes by ohmic resistance. However, such resistances lower the efficiency of the rectifier. Better and more efficient commutation may be obtained by using additional capacitances instead of the shunt resistances. In view of the previous article by some of the present authors, published in this journal, 1959, No. 6, the operation of mechanical rectifiers is now considered and the conditions necessary to obtain sparkless commutation are established.

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S/144/60/000/010/007/010
E194/E355

The Influence of Capacitance on the Operation of a Mechanical Rectifier

Fig. 1 shows a circuit of a single-phase mechanical two-plate rectifier with supply transformer. The differential equation for the concluding stage of commutation is given and analysis of its solution makes it possible to establish a physical picture of the processes during current commutation. Near the point where the voltage of the supply to the rectifier passes through zero there is a certain current when the transformer and load circuit are interrupted. As both transformer and load have appreciable inductance, a charging current passes into the capacitor. Later the capacitance discharges, partially through the transformer winding and partially through the load. The process of discharge may be periodic or aperiodic. Since the natural capacitance of the transformer is small, considerable over-voltages are set up in the process of current switching; their peak values reach 200 - 230 V. These over-voltages can cause severe sparking at the brushes. As the

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The Influence of Capacitance on the Operation of a Mechanical Rectifier

capacitance is increased the over-voltage is reduced, and the duration of the concluding stage of commutation extends because the frequency of voltage restoration falls. Restoration of the voltage follows a sinusoidal law. The amplitude is exponentially damped and is superimposed on the sinusoidal supply voltage. As the capacitance is increased to a value of $4\ L/r^2$, the periodic law of voltage restoration becomes aperiodic, so improving the electromagnetic conditions of current commutation. The rectifier ceases to spark over a wide range of change of load. All this is illustrated by the oscillograms of Fig. 2.
Operation of a three-phase mechanical rectifier is then considered. The principles of this machine have been described elsewhere and are not enumerated here. The influence of capacitance on the current commutation of a three-phase mechanical rectifier was studied with the circuit

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E194/E355

The Influence of Capacitance on the Operation of a Mechanical Rectifier

shown schematically in Fig. 3. The tests were made with purely resistive and also with mixed inductive loads. This second type of load is the most difficult to provide for and so the results given below relate to it. Fig. 4 shows oscillograms of rectified voltage and current (a) with a capacitance of 1 036 μF and (b) with a resistance of 3.3 ohm and no capacitance.
It will be seen that the over-voltage peaks typical of mechanical rectifiers without shunt resistances are absent from both these curves. When shunt resistance is used there is an appreciable fall in the efficiency of the rectifier, whereas with shunt capacitance the efficiency is 97%.
Fig. 5 shows oscillograms of rectified current and voltage (a) with shunt capacitance and (b) with shunt resistance. The rectification coefficient is 10 - 15% higher with capacitance than with resistance. The article concludes with

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S/144/60/000/010/007/010
E194/E355

The Influence of Capacitance on the Operation of a Mechanical Rectifier

instructions for adjusting the rectifier to secure optimum operating conditions. There are 5 figures and 4 Soviet references.

ASSOCIATION: Kafedra elektricheskikh mashin Ural'skogo politekhnicheskogo instituta (Department of Electrical Machines, Ural Polytechnical Institute)

SUBMITTED: January 20, 1960

Card 5/5

S/144/60/000/03/008/017
E194/E455

AUTHORS: Siunov, N.S., Doctor of Technical Sciences, Professor, Head of the Chair for Electrical Machinery and Kovylov, B.V., Aspirant, Chair for Electrical Machinery

TITLE: Practical Adjustment of Current Commutation

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Elektromekhanika, 1960, Nr 3, pp 71-74 (USSR)

ABSTRACT: An editorial note states that the method was developed simultaneously by A.G.Nazikyan of the Novocherkassk Polytechnical Institute.

Previous work has shown that commutation of motors may be improved by connecting capacitors either between individual commutator bars or between the main brush and an auxiliary brush located behind its trailing edge. The second of these methods is more convenient because it does not involve mounting capacitors on the armature but it is somewhat less effective. The tests described were made on a d.c. motor of 6.8 kW, 220 V, 1000 rpm. An oscillogram of the commutation voltage is given in Fig 2 and shows that after the brush has opened the short-

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Practical Adjustment of Current Commutation

circuit on the section, the voltage across the section is restored on a rapidly damped curve, in accordance with the theoretical conclusions of an article published by the author in Elektromekhanika, 1959, Nr 6. These overvoltage peaks can vary over a wide range. A graph of the overvoltage amplitude as a function of the capacitance connected for the motor under test is plotted in Fig 3 and it will be seen that the curve is asymptotic. The first ten microfarads of capacitance notably reduce the overvoltage: thereafter considerable increase in capacitance causes relatively small further decrease. It was found that on introducing capacitance into the auxiliary brush circuit, the zone of sparkless operation is extended by 20 to 25% and is limited by sparking at the auxiliary brush. A graph of the amplitude of overvoltage as a function of interpole boost is plotted in Fig 4 and shows that up to a point, interpole boost reduces the overvoltage amplitude. Beyond this point the overvoltage increases again, though it is now of opposite sign, as will be seen from

S/144/60/000/03/008/017
E194/E455

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the three oscillograms of Fig 5. A new method of adjusting commutation is based on the use of this effect. An insulated auxiliary brush is installed 2 to 2.5 mm behind the trailing edge of the main brush and the voltage between the brushes is measured by means of an oscillograph shunted with a capacitance of 4 to 10 microfarads. The interpole flux is then adjusted until the oscillograph shows minimum voltage. The magnitude of the peak voltage may instead be measured by a valve voltmeter. The position of minimum voltage corresponds to the centre of the zone of sparkless operation. The procedure also reveals the presence of mechanical vibration of the brushes. There are 6 figures and 3 Soviet references.

ASSOCIATION: Ural'skiy politekhnicheskiy institut
(Ural Polytechnical Institute)

SUBMITTED: October 25, 1959

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S/196/61/000/009/030/052
E194/E155

AUTHORS: Siunov, N.S., Gavrilov, B.K., and Kovylov, B.V.

TITLE: A synchronous motor with mechanical rectifier shunted by capacitance

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.9, 1961, 23, abstract 9I 155. (Vestn. elektroprom-sti, no.2, 1961, 45-48)

TEXT: The commutation of the mechanical rectifier of a machine field system was investigated. The supply was from a three-winding transformer controlled by a magnetic shunt. The alternating current side of the mechanical rectifier was shunted by capacitors connected in delta. The single-phase current rectification conditions are considered. The physical processes that take place in mechanical rectifiers are explained and the value of capacitance required to ensure sparkless commutation is selected. It is established that the transformer circuit of the mechanical rectifier should contain the following ohmic resistance:

$$r_k = 2\sqrt{L/C}$$

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A synchronous motor with ...

It would not be rational to increase the transformer resistance, because of the consequent lower efficiency, and so the necessary conditions can be achieved by connecting shunt capacitance C across the rectifier input. The additional capacitance reduces the amplitude, frequency and rate of voltage restoration, thus extending the sparkless zone to angular differences of up to 30 electrical degrees. Shunting resistors selected to give maximum efficiency give sparkless commutation in the zone up to 10 electrical degrees when the rectifier operates with a transformer without compounding winding. The greatest width of the sparkless zone achieved by the use of input capacitance across the rectifier, and the possibility of maintaining the angular difference at the lowest levels, together ensure sparkless operation of the rectifier over all ranges of motor load under static and dynamic conditions. A motor with the suggested field circuit has greater static and dynamic stability than motors with machine excitation, and the efficiency of a mechanical rectifier, allowing for the additional capacitors, is 96-97%. 5 illustrations.

[Abstractor's note: Complete translation.]

Card 2/2

SIUNOV, N.S.; KOVYLOV, B.V.

Choice of the shunting capacitance for the mechanical rectifier of a synchronous motor. Izv. vys. ucheb. zav.; elektromekh. 4 no.10:111-112 '61. (MIRA 14:11)
(Electric motors, Synchronous)

NEKLYUDOVA, L.I.; KOVYLOVA, Ye.M.

Problem of the effectiveness of vaccination against influenza. Vop. virus. 1 no.2:13-16 Mr-Ap '56. (MLRA 10:1)

1. Kafedra mikrobiologii Kubanskogo meditsinskogo instituta i Krayevaya sanitarno-epidemiologicheskaya stantsiya, Krasnodar.
(INFLUENZA, prevention and control,
vacc., effectiveness (Rus))
(VACCINES AND VACCINATION,
influenza vacc., effectiveness (Rus))

KOVYLOVA, YE. M., NEKLYUDOVA, L. I.

"On the problem of effectiveness of anti-grippe vaccination."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists and Infectionists, 1959.

KOVYLYANSKIY, Ya.A., inzh.

Centralized heat supply of Sverdlovsk based on an efficient long-distance heat transmitting network. Teploenergetika 11 no.11:17-23 N '64. (MIRA 17:12)

1. Ural'skoye otdeleniye Vsesoyuznogo gosudarstvennogo proyektnogo instituta "Teploelektroproyekt".

S/123/61/000/003/012/023
A004/A104

AUTHORS: Severdenko, V. P.; Prosvirov, N. T., and Kovylyayev, N. P.

TITLE: Small-flash die-forging and the calculation elements of small-flash dies for body of revolution blanks

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 3, 1961, 7, abstract 3V48 ("Sb. nauchn. tr. fiz.-tekhn. in-t AN BSSR", no. 5, 1959, 66-69)

TEXT: The authors describe the advantages of small-flash die-forging over flashless forging and die-forging in open dies. They present the calculation elements for small-flash dies. There is 1 figure and 1 reference.

Ya. Golombik

[Abstractor's note: Complete translation]

Card 1/1

Kovylyayev, N.P.

PHASE I BOOK EXPLOITATION SOV/4018

Akademiya nauk Belorusskoy SSR. Fiziko-tekhnicheskiy institut

Sbornik nauchnykh trudov, vyp. 5 (Collected Scientific Papers of the Institute of Engineering Physics, Academy of Sciences Belorusskaya SSR, No. 5) Minsk, Izd-vo AN BSSR, 1959. 235 p. Errata slip inserted. 1,100 copies printed.

Ed. of Publishing House: L. Mariks; Tech. Ed.: I. Volokhanovich; Editorial Board: V.P. Severdenko, Academician, Academy of Sciences BSSR (Chief Ed.), K.V. Gorev, Academician, Academy of Sciences BSSR, M.N. Bodyako, Candidate of Technical Sciences, and P.A. Parkhutik, Candidate of Technical Sciences.

PURPOSE: This book is intended for technical personnel and scientific workers.

COVERAGE: This collection of 23 articles covers the following subjects: small draft rolling analysis of wire-drawing, design of drop-forging dies, impact upsetting, examination of the effect of temperature on plastic deformation, sulphidation and carburizing processes, the phenomena of pulse-discharge, etc.

Kovynev, M.

ASTANIN, Petr Petrovich, prof., zasluzhennyy deyatel' nauki RSFSR; UZYUMOV, Vasiliy Lavrent'yevich, kand.veterinarnykh nauk; KOVYNDIKOV, Mikhail Semenovich, kand. veterinarnykh nauk; GOL'DSHTEYN, S.A., red.; CHURAYEVA, Z.V., tekhn.red.

[Biochemistry] Biokhimiia. Pod obshchei red. P.P.Astanina. Moskva, Gos.izd-vo sel'khoz. lit-ry, 1957. 167 p. (MIRA 11:3)
(BIOCHEMISTRY)

KOVYNDIKOV, M. S.

"Changes in Meat Which Has Been Frozen in Blocks After Prolonged Storage." Cand Vet Sci, Leningrad Veterinary Inst, Leningrad, 1954. (RZhKhim, No 23, Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

PROSTYAKOV, A.P.; FORTUSHNYY, V.A.; KOVYNDIKOV, M.S.

Changes in the blood serum protein content in pregnant cows and young calves. Ukr. biokhim. zhur. 33 no.4:505-513 '61. (MIRA 15:6)

1. Ukrainian Experimental Veterinary Research Institute, Kharkov.

(BLOOD PROTEINS) (PREGNANCY)

LEBEDEV, P.T.; USOVICH, A.T.; CHEPUROV, K.P., prof.; KAL'CHENKO, M.M., aspirant; MATUSEVICH, V.F., doktor veterin. nauk; STEN'KO, A.S., mladshiy nauchnyy sotrudnik; LAKHMYTKINA, A.N., aspirant; GRISHCHENKO, N.F.; ORLOV, A.I., veterinarnyy vrach (Arkhangel'skaya obl.); PROSTYAKOV, A.P., kand. biolog. nauk; KOVYNDIKOV, M.S., kand. veterin. nauk; ARIFDZHANOV, K.A., kand. veterin. nauk

Veterinary experiments. Veterinariia 41 no.4:101-111 Ap '64.
(MIRA 17:8)

1. Sibirskiy nauchno-issledovatel'skiy veterinarnyy institut (for Lebedev, Usovich). 2. Poltavskiy sel'skokhozyaystvennyy institut (for Chepurov, Kal'chenko). 3. Ukrainskiy nauchno-issledovatel'skiy institut zemledeliya (for Matusevich, Sten'ko, Lakhmytkina). 4. Chernigovskaya oblastnaya veterinarnaya laboratoriya (for Grishchenko). 5. Ukrainskiy nauchno-issledovatel'skiy institut eksperimental'noy veterinarii (for Prostyakov, Fortushnyy, Kovyndikov). 6. Uzbekskiy nauchno-issledovatel'skiy veterinarnyy institut (for Arifdzhanov).